MAN BEHIND THE TRAIN

The Dispatcher Holds Hundreds of Lives in His Hands.

(Chicago News.)

Nearly every one who has ridden on a train—and that means every one, of course—has awakened in the night as the fast running engine has stopped, away off at some little way station, and, raising the curtain of his berth, has looked out and watched a telegrapher rush forth from the dimly lighted station and hand to the engineer in the cab, and the conductor, who walks along the platform with a lantern on his arm, bits of yellow tissue paper. The two officials of the train will t hen read the yellow slips and perhaps consult a moment over them. Then the engineer will take the signal from the conductor and the train will start, while, as the sleeper passes the telegraph office, the operator will be seen clicking away at his instrument as if that were the most ordinary thing in the world.

It is, to him: also to the train crew. Yet those little slips of yellow tissue paper are the life or death warrants of the whole trainload of passengers and employes, and the slightest mistake in them, either in sending, receiving or reading, may mean the snuffing out of scores of human lives.

Only one end of the process whereby the yellow slips are placed in the hands of the train operatives is seen by the man at the sleeper window. That is the easy part. It is a simple thing for a man to sit at the end of a wire and listen while some one else, perhaps hundreds of miles away, tells him what to do. It is nothing hard for the men who get the yellow bits of paper to do what they are told. But the fellow at the other end of the wire—he has another proposition to face. It is his duty to plan so that the orders on the tissue paper will be corerct, and so that they will carry out the design of the railroad, which is to transport passengers and freight safely and expeditiously. If he should fail—things would happen that it is direful even to imagine. And yet not one man in 1,000 has any conception of how those yellow slips are sent forth, and who is the man who sends them.

"The man behind the trains" must be a human cog in a machine, but he must be an infallible one. He must sit at a desk and operate many miles of railroad, with passenger and freight trains, regular and special, all moving at once, in at least two directions; he must keep them going, without their meeting on a single track, without their stopping when they ought to be going, or running when they should be standing still. In a word, he must see that the entire system is operated, and he cannot see an iota of what he is doing. He must trust everything to that little wire, and the men at the end of it, and, again, to the men who receive what he sends out.

A single break in this chain that leads from his desk and there is a catastrophe that makes rich material for lawsuits and terrible reading for the public next day, not to speak of the tremendous loss of money and business to his road. He must keep his head on his shoulders all the time through the eight hours that he works, and know every train that moves,, every station and grade and crossing and switch on the road; he must be familiar with the pulling capacity of the engines and the trains that are attached to them: the length of the switches and turnouts, and the length of the trains to be ordered on them; the water and coaling stations, and the ability of the engines to reach one from the other—and, besides, he must be able to tell, when a train is late, what to do with it: how to care for the extras, and how to make every minute that a train is out one of earning power for the road.

He is the brain that moves the traffic of the road, even to its farthermost point.

In fiction, the train dispatcher is a wild-eyed fellow, who is continually jumping about glaring out of the windows, rushing to keys and rapping out messages, shouting "My God!" when he makes a mistake, and taking to the woods to avoid the consequences. In reality the train dispatcher is a quite earnest chap, who sits calmly at his desk, and does his work methodically and well; he doesn't get excited, and he doesn't jump about in a crazy fashion; he keeps his mind on his task, and he doesn't make mistakes.

He has the map of the road before his eyes all the time, and he knows where every train is or ought to be at any given time, and if it isn't there he waits till it gets there before he puts another one in the same place. He makes use of every device known that will aid him, and his work is the same to him as the plowboy's is to the farm lad; he is used to it. But that doesn't take away from the fascination or the thrilling qualities of it, just the same.

The train dispatchers of the Kansas City roads occupy little houses or rooms in the company's buildings there, where they will not be bothered. They have their instruments—all are expert operators—before them, and they have what assistants they need. The schedule of the road shows just where every train should be at the proper time, and so long as things run in the proper way their duties are easy; all they have to do is to keep things moving. This they do by keeping themselves fully informed first and the operators along the line posted afterward.

Under these conditions the little red boards that are usually parallel with the track, in front of a station, remain still, and the engineer, as he approaches stops if it is a station where he is scheduled to do so, and runs by with a shout and a wave of the hand if it is not. The dispatcher knows that a train passes, of course, from the operator there, and he makes a mental or physical note of the fact, and thinks no more of it.

However, when there is a special on the line things are different. Up on the wall, most likely, hangs a train board, so called. This is a common part of all railroad dispatchers' office, though not universal. It is a big blackboard, painted one way with the hours and the other with the stations. From the top, fastened to pegs, depend a vast array of colored cords. Each one represents a train. By following the course of a cord across the board it will indicate just when each train is due at every station on that division of the road.

This is a very untechnical description of this apparatus, but it will suffice. It enables the operator to glance up and see where every train in his division should be at a given time. Of course, if a train is late, he adds so much to the time or takes away such a distance from the train's position, and arrives at its present place. He may change the pegs, of course; then he would have a permanent record, till he made another change. He also has a schedule showing on paper the same things. By means of these he knows his road to a fraction. Some offices have boards with little pegs, which the dispatcher moves from station to station as the trains are reported. By means of this he can arrive at the same results, but with more work.

It doesn't startle a dispatcher much to learn that a train is a couple of hours late, say. He merely has to keep other trains moving along till they approach within a reasonable distance; then he sends them or the late one to a siding till they pass. It demoralizes the schedule, of course, but the occurrence is so usual that it is easily a matter of adjustment. But a stray special coming in on time makes more work.

Perhaps the president has taken a notion to go over the road—why, a dispatcher never can understand. He receives word from the dispatcher just ahead that he must prepare for it. He knows how fast it is going, and then he must figure out where he will sidetrack everything else on the road to accommodate it. He must then call in his knowledge of the topography of the road, the hauling powers of the engines, the switching and all the minor details set out above. He must let the regular traffic go on just as long as it is safe to do so before sending it to the siding; he must be sure that the siding will accommodate the train or he will hear from the special that it had to "saw by," which will be to his eternal disgrace; and he must know that such a freight can pull such a grade in such a time, or there will be a delay for the special while the "split" freight is taken up in two sections, and again he will hear unpleasant things.

"Sawing by" is a necessary operation, however, very often. The immense engines which haul almost miles of cars on the western roads were put on after the tracks were laid, and, of course, no provision was made for the loads which they can carry. Therefore, when one is sent to a switch too short for its train, it must "saw" or block the road. This is accomplished in this way:

Suppose there were two trains going each way. The special having the right of road would pull down on the main line opposite the siding, the special going the other way then running around the siding on to the main track at the other end, and in front of the second right of way train. Then the second train, which had not the right, would pull into the siding, while the special "right" train would run down on the main line past the siding on its journey. Then both siding trains would back up till the special one was within the siding, and the second "right" train would pull up opposite the siding on the main line. That would leave the way open for both siding trains and all would be clear. The same thing can be accomplished with very long single trains by splitting them. This is a tedious and chagrining operation, however, and the rule by which dispatchers avoid it is "never put on any piece of track between sidings more than the siding will hold."

To avoid "doubling the hill" is another thing that the dispatcher must watch. This wastes time. An overloaded freight is unable to pull some especially steep grade. It must split the train, leave part of it at the foot, haul the front half to the siding at the top, uncouple and go back after the tail end.

Of course especially slippery rails might cause this at any time, or a breakdown, but that is no fault of the dispatcher. His aim is to put into a train only so much as an engine can carry up the worst grade in the system; then the rest are safe. This is really the work of the chief dispatcher; he orders out the equipment and makes up the train, and he should know all about how many cars he has in his trains, the motive capacity, grades, and so on.

The golden rule of the train dispatcher, says the Kansas City Journal, is: "Touch not." So long as trains are running in proper shape let them alone. They will take care of themselves. It is only when emergencies arise that it is wise to supersede the regular running schedule. In the "yards" the dispatcher is not in authority; there the yardmaster runs things. But after a train is made up the conductor goes to the dispatcher and gets his orders. If he is running a regular train he simply receives a clearance, which means, "get out and take care of yourself." But if he has a special or an extra he is very explicitly directed and every movement he makes is guarded. If he has an unimportant freight, for instance, he may lay up at some station just outside Kansas City for hours because incoming and outgoing regulars monopolize things. Then when he gets free track he goes ahead from one station to another, always in touch with the operator at whose station he is. Thus he is virtually kept dangling at the end of a wire all the time.

It is through the station operators that the dispatcher learns how things are going. They report every train that arrives and departs. In this way every one can be checked at any time and can be reached by means of the warning board at any station on the road.

BLOWING UP OF THE MAINE.

General Fitzhugh Lee's Theory of the Destruction of the Vessel.

General Fitzhugh Lee recently gave his theory regarding the destruction of the battleship Maine. After relating the circumstances of the explosion and describing the scene of fire and carnage he witnessed on visiting the locality a few minutes after the event, he said:

"My theory is that it was done by young officers who had been attached to Weyler. After the catastrophe they disappeared. Young officers of the (Spanish) army did not take the trouble to hide their pleasure over the horrible affair. Many of them dropped their usual potations of red wine and opened bottles of champagne in the cafes. The government of Cuba immediately tried to forestall European opinion by sending a dispatch which stated that the explosion had been caused by the carelessness of the Americans themselves. As to that I want to say that the keys to the magazine of every American man-of-war are brought to the captain and are hung on hooks at the head of his bed so that he can know where they are all the time.

"When the divers went to work on the Maine Captain Sigsbee said to them: 'Go into my cabin and see if the keys to the magazine are hanging where they ought to be. The divers came up with the keys. They had found them hanging by the side of the captain's bed. Furthermore, the investigation brought out that the plates of the fore part of the ship were bent upward, showing clearly that the force of the explosion had been directed from the bottom. The court of inquiry heard plenty of testimony which showed that there had been two explosions; one when the torpedo went off and tore its way to the ship's magazine, and the other when the magazine itself exploded with a roar."

The real cause of the destruction of the Maine is still a mystery, though there is strong reason for accepting General Lee's view. The report of the United States court of naval inquiry sustained the theory of an outside explosion, but said "the court has been unable to obtain any evidence fixing the responsibility for the destruction of the Maine upon any person or persons." The solution of such mysteries comes in time, says the Indianapolis Journal, and probably this one will be solved when those who are in possession of the secret think the right time has come.